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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/800,477	09/800,477 03/08/2001		Thomas Dodt	P20466	4933	
7055	7590	03/17/2004		EXAMINER		
		ERNSTEIN, P.L.C	JOHNSTONE, ADRIENNE C			
RESTON,	ND CLARKE PLACE /A 20191			ART UNIT	PAPER NUMBER	
•				1733	15	
			1	DATE MAILED: 03/17/2004	1	

Please find below and/or attached an Office communication concerning this application or proceeding.

		A					
	Application No.	Applicant(s)					
Office Action Summary	09/800,477	DODT ET AL.					
Office Action Summary	Examiner	Art Unit					
7. 444.000 0.000	Adrienne C. Johnstone	1733					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with t	he correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply y within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS a, cause the application to become ABAND	be timely filed  ) days will be considered timely.  from the mailing date of this communication.  ONED (35 U.S.C. 8 133).					
1) Responsive to communication(s) filed on <u>07 O</u>	October 2003.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.						
3) Since this application is in condition for alloware closed in accordance with the practice under E	nce except for formal matters Ex parte Quayle, 1935 C.D. 11	prosecution as to the merits is 453 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-21 is/are pending in the application							
4a) Of the above claim(s) is/are withdra	wn from consideration.						
5) Claim(s) is/are allowed.	···						
6)⊠ Claim(s) <u>1-3 and 6-21</u> is/are rejected.	Claim(s) 1-3 and 6-21 is/are rejected.						
7)⊠ Claim(s) <u>4 and 5</u> is/are objected to.							
8) Claim(s) are subject to restriction and/o	or election requirement.						
Application Papers							
9)⊠ The specification is objected to by the Examine	er.						
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b) $\square$ objected to by t	he Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance.	See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct							
11) ☐ The oath or declaration is objected to by the E>	kaminer. Note the attached Of	fice Action or form PTO-152.					
Priority under 35 U.S.C. §§ 119 and 120							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority	s have been received. s have been received in Appli rity documents have been rec	cation No.					
application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domesti since a specific reference was included in the firs 37 CFR 1.78. a) The translation of the foreign language pro	of the certified copies not reconception of the certified copies not reconcept the specification of the specificat	19(e) (to a provisional application) n or in an Application Data Sheet.					
14) Acknowledgment is made of a claim for domesti reference was included in the first sentence of the content of the first sentence of the content of the c	c priority under 35 U.S.C. §§	120 and/or 121 since a specific					
Attachment(s)							
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)					

#### DETAILED ACTION

# Response to Arguments

In view of the appeal brief filed on October 7, 2003, PROSECUTION IS HEREBY
 REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

#### Specification

2. The added subject matter filed in this continuing application which is not supported by the original disclosure in the parent application is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the new language in paragraphs 0029, 0031, and 0033-0035 is not supported by the original disclosure (parent application as originally filed).

Applicant is required to cancel the new matter in the reply to this Office Action.

This objection is made for the same reasons as set forth in paragraph 1 of the Office action mailed July 17, 2002 (Paper Number 3). Applicants argue that the added subject matter corresponds to the claims filed in this application, but because this application is a continuation of parent application 08/955,920 the original disclosure is the parent application as originally

below.

filed and not this application as originally filed (MPEP 608.04(b): the changes to the parent application disclosure as originally filed constitute a preliminary amendment which does not form part of the original disclosure in this <u>continuation</u> application). Applicants' other arguments are addressed in the 35 U.S.C. 112 first paragraph rejections of claims 1-3 and 6-21

### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-3 and 6-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a) Applicants argued in the remarks accompanying the amendment filed October 10, 2002 and continue to argue that the instant claim 1 language requiring the sound-absorbing insert to be "coupled to" an acoustically transparent support element "comprising at least one layer of fibers oriented in a circumferential direction" includes the embodiment wherein the support element is provided as fibers that are distributed preferably uniformly in the sound-absorbing insert and oriented predominately in the circumferential direction of the tire (specification paragraphs 0016, 0025-0026, and 0071-0072 and parent specification p. 4 lines 9-12, p. 6 lines 1-13, and p. 11 lines 11-30). Specifically, Applicants alleged and continue to allege that the above-noted embodiment supports the instant claim 1 language. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See In re Hill, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The terms "layer of fibers" and "coupled to" in claim 1 are therefore used by the claim in view of applicants' arguments to

mean "a group of fibers" and "forming part of," while the accepted meanings are "a single thickness or stratum of fibers" and "joined, linked, or connected to"; in the above-noted embodiment the fibers distributed inside the sound-absorbing insert are clearly not segregated into single thicknesses or strata of fibers and are not a distinct entity joined, linked, or connected to the sound-absorbing insert.

Applicants' new arguments concerning the definitions of the terms in question are directed only to the woven mesh embodiment and therefore do not adress the above-noted issue concerning the embodiment wherein the support element is provided as fibers that are distributed preferably uniformly in the sound-absorbing insert and oriented predominately in the circumferential direction of the tire. One way to overcome this rejection would be to confirm on the record that the instant claim 1 language is NOT supported by the embodiment wherein the support element is provided as fibers that are distributed preferably uniformly in the sound-absorbing insert and oriented predominately in the circumferential direction of the tire.

b) The term "foil" (very thin layer) as recited in instant claim 6 is a relative term which renders the claim indefinite (the claim is now without the requirement that the foil somehow include a layer of fibers, which effectively set the thickness of the "foil" to be the same as the the thickness of the layer of fibers). The required thickness of the "foil" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Applicants now argue that the term "foil" is defined in Webster's II New College Dictionary as "a thin flexible sheet of metal" and that the recited foil has a conventional foil thickness, however this definition cannot be applied in the instant application because it contradicts applicants' preferred embodiment wherein the perforated foil is made of *synthetic* material (specification paragraph 0061). One of ordinary skill in the art would therefore

understand a "foil" in this context to generally mean a very thin layer of material as noted above but would not know the required thickness range for such a general definition. Applicants' preferred embodiment wherein the perforated foil is made of synthetic material would be understood by one of ordinary skill in the art to be a synthetic film, defined as a planar form of plastic having a thickness of up to 0.25 mm depending on the particular intended use of the film (see for example *Encyclopedia of Polymer Science and Engineering*, Volume 7, p. 73); one way to overcome this rejection would be to change the term "perforated foil" to -- perforated synthetic film, defined as a perforated layer of plastic material having a thickness of up to 0.25 mm, -- in claim 6 and amend the first line of specification paragraph 0061 such that "in particular consisting of synthetic material" is changed to -- in particular a perforated synthetic film, defined as a perforated layer of plastic material having a thickness of up to 0.25 mm --

c) The claim 7 limitation that the perforated foil is isotropic directly contradicts claim 6 as amended, which requires the perforated foil to be "oriented in the circumferential direction": the material forming the foil itself (e. g., polymer chain structure) cannot be both isotropic and "oriented" (isotropic foil = foil having same material properties in all directions).

It appears from applicants' arguments that applicants intend the perforated foil to be -extending -- in the circumferential direction rather than be "oriented" in the circumferential
direction (contrary to applicants arguments, one of ordinary skill in the art would attribute the
art-specific definition to the term "oriented", meaning the structure of the material itself such as
polymer chain structure has a particular orientation: see for example *Engineering Materials*Properties and Selection, pp. 48 and 49); one way to overcome this rejection would be to change
"oriented" to -- extending -- in claim 6 lines 8 and 10.

d) Applicants now argue that the parent application original disclosure recites the claim

10 language requiring the wrapped strip of sound-absorbing material to have "at least one side"

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coupled to the acoustically transparent support element, however this is not true when the claim is interpreted in light of the specification specification paragraph 0067 and parent specification p. 10 lines 12-13 clearly require the acoustically transparent support element to be coupled to the strip on at least the radially outer side (one of ordinary skill in the art would understand the recitation that the only one side "should be the outer side in the radial direction in the wrapped state" to require the side to be the radially outer side contrary to applicants' arguments).

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 1-3 and 6-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.
- A. There is no literal support in the parent application original disclosure for the instant claim 1 language.

Applicants have literal support in the parent application for the following:

- 1) the generic language describing the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11);
- 2) the alternative generic language describing the sound-absorbing insert as opencell foamed material whose pores are oriented predominately in the circumferential direction to provide the insert with tensile strength in the circumferential direction

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(specification paragraphs 0012-0014, 0024, and 0070 and parent specification p. 3 lines 13-27, p. 5 lines 24-30, and p. 10 line 27 - p. 11 line 9)

- 3) the subgeneric language describing the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11) including wrapping the support element over the surface of the sound-absorbing insert that is open to the tire interior such that it covers at least a portion of the insert cross-section (specification paragraph 0015 and parent specification p. 3 line 29 p. 4 line 1);
- 4) the alternative subgeneric language describing the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11) including flayers off the support element placed at discrete radial distances from each other in the sound-absorbing insert (specification paragraph 0016 and parent specification p. 4 lines 4-9) such as by forming the insert from a ring-shaped strip of sound-absorbing material that is looped around the rim several times, the support element attached to at least the outer side of the strip such that each layer of the strip also contains a support element layer (specification paragraphs 0020-0021 and 0064-0067 and parent specification p. 4 line 29 p. 5 line 6 and p. 9 line 25 p. 10 line 13);
- 5) the species wherein in the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11) the support element is provided as fibers that are distributed preferably uniformly in the sound-absorbing insert and oriented predominately in the circumferential direction of the

tire (specification paragraphs 0016, 0025-0026, and 0071-0072 and parent specification p. 4 lines 9-12, p. 6 lines 1-13, and p. 11 lines 11-30) which therefore is covered by neither instance of subgeneric language (the fibers preferably uniformly distributed inside the insert are neither wrapped over the surface of the sound-absorbing insert that is open to the tire interior such that it covers at least a portion of the insert cross-section nor placed in layers at discrete radial distances from each other in the sound-absorbing insert);

- 6) the species wherein in the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11) the support element is provided as a woven mesh (specification paragraphs 0017, 0053-0060, and 0065 and parent specification p. 4 lines 14-18, p. 7 line 25 p. 9 line 7, and p. 10 lines 1-7) covered by both instances of subgeneric language (the woven mesh can be either wrapped over the surface of the sound-absorbing insert that is open to the tire interior such that it covers at least a portion of the insert cross-section or placed in layers at discrete radial distances from each other in the sound-absorbing insert); and
- 7) the species wherein in the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent specification p. 3 lines 9-11) the support element is provided as a perforated foil (specification paragraphs 0018, 0061, and 0065 and parent specification p. 4 lines 20-23, p. 9 lines 9-14, and p. 10 lines 1-7) covered by both instances of subgeneric language (the perforated foil can be either wrapped over the surface of the sound-absorbing insert that is open to the tire interior such that it covers at least a portion of the insert cross-section or placed in layers at discrete radial distances from each other in the sound-absorbing insert).

By contrast, the subgenus language of instant claim 1 requires the sound-absorbing insert to be "coupled to" an acoustically transparent support element "comprising at least one layer of fibers oriented in a circumferential direction" which clearly does not have literal support in the parent application original disclosure: the presence of dependent claims 4 and 5 directed to the woven mesh support element makes clear that the instant claim 1 language encompasses something more than just the originally disclosed woven mesh (otherwise these claims would not further limit claim 1). Note that applicants' arguments mischaracterize the examiner's position as requiring literal support for the claim 1 subject matter, which is clearly not the examiner's position in view of part B below.

B. There is no inherent support in the parent application original disclosure for the instant claim 1 language.

Applicants argue that the subgenus language of instant claim 1 requiring the soundabsorbing insert to be "coupled to" an acoustically transparent support element "comprising at least one layer of fibers oriented in a circumferential direction" is inherently disclosed because the general importance of tensile strength in the circumferential direction of the insert is disclosed and the woven mesh species is disclosed, however this is not the case here because:

1) The test for compliance with the written description requirement of 35 U.S.C. 112 first paragraph is not what would have been *obvious* to one of ordinary skill in the art but what is expressly or inherently *disclosed*. See, e.g., *Lockwood v. American Airlines Inc.*, 41 USPQ2d 1961, 1966 (CAFC 1997)("Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed. ... The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. Rather, a prior application itself must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the

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inventor invented the claimed invention as of the filing date sought ... A description which renders obvious the invention for which an earlier filing date is sought is not sufficient.") and In re Barker and Pehl, 194 USPQ 470, 474 (CCPA 1977) quoting In re Winkhaus, Tusche, and Kampf, 188 USPQ 129, 131 ("That a person skilled in the art might realize from reading the disclosure that such a step is possible is not a sufficient indication to that person that that step is part of appellant's invention.").

- 2) The parent application original disclosure does not include a representative number of specific support element embodiments to adequately describe the new subgenus language of instant claim 1 requiring the sound-absorbing insert to be "coupled to" an acoustically transparent support element "comprising at least one layer of fibers oriented in a circumferential direction". See, e.g., University of California v. Eli Lilly and Co., 43 USPQ2d 1398, 1406.
  - a) The presence of dependent claims 4 and 5 directed to the woven mesh support element makes clear that the instant claim 1 language encompasses something more than just the originally disclosed woven mesh (otherwise these claims would not further limit claim 1).
  - b) The only one of the originally disclosed support element examples noted above containing any fibers in a distinct layer (as opposed to the short fibers uniformly distributed in the insert material itself, specification paragraphs 0016, 0025-0026, and 0071-0072 and parent specification p. 4 lines 9-12, p. 6 lines 1-13, and p. 11 lines 11-30) is the specific woven mesh support element (specification paragraphs 0017, 0053-0060, and 0065 and parent specification p. 4 lines 14-18, p. 7 line 25 p. 9 line 7, and p. 10 lines 1-7).
  - c) The originally disclosed generic language describing the sound-absorbing insert provided with an acoustically transparent support element exhibiting tensile strength in at least the circumferential direction (specification paragraph 0011 and parent

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specification p. 3 lines 9-11) in combination with the originally disclosed embodiment wherein the support element is in the form of a woven mesh (specification paragraphs 0017, 0053-0060, and 0065 and parent specification p. 4 lines 14-18, p. 7 line 25 - p. 9 line 7, and p. 10 lines 1-7) does not adequately describe the particular subgenus of support elements "comprising at least one layer of fibers oriented in a circumferential direction" "coupled to" the sound-absorbing insert for purposes of compliance with the written description requirement of 35 U.S.C. 112 first paragraph because there is no indication in the parent application original disclosure that applicants considered the subgenus structure to be the only characteristic of the woven mesh important in achieving circumferential tensile strength (for example, it may very well be at least as important that the woven mesh has fibers extending around the entire circumference of the insert and/or transverse fibers linking together the circumferential fibers in order to provide the requisite degree of tensile strength to the insert) and there are no other originally disclosed support element embodiments sharing the subgenus characteristics that would suggest that applicants were in possession of that subgenus at the time of filing of the parent application. See, e.g., In re Smith, 173 USPQ 679, 683-684 (CCPA 1972)(generic disclosure plus species with at least 12 carbon atoms did not support subgenus of at least 8 carbon atoms) and In re Lukach, Olson, and Spurlin, 169 USPQ 795, 797 (generic disclosure of small molecular weight ratio plus species of molecular weight ratio 2.6 did not support molecular weight ratio 2.0-3.0). This is especially true in view of applicants' statement that "A series of possibilities exist for concrete embodiments of the support elements" (specification paragraph 0017 and parent specification p. 4 line 14), the specific nonfibrous perforated foil support element embodiment (specification paragraphs 0018, 0061, and 0065 and parent specification p. 4 lines 20-23, p. 9 lines 9-14, and p. 10 lines 1-

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7), and the virtually unlimited and *unpredictable* number of possible support element materials and constructions generically having tensile strength in at least the circumferential direction, including material whose microstructure has been chemically or physically modified to produce the requisite degree of tensile strength in the circumferential direction.

C. There is no literal or inherent support in the parent application original disclosure for the instant claim 6 language.

Applicants recite in claim 6 as amended that the perforated foil is "oriented in a circumferential direction," which is clearly not supported by the parent application original disclosure: the perforated foil has tensile strength in the circumferential direction but the material forming the foil itself (e. g., polymer chain structure) is not disclosed to be "oriented". This is especially true in view of applicants' preferred embodiment of an *isotropic* perforated foil (isotropic foil - foil having same material properties in all directions). See paragraph 4 part c: it appears from applicants' arguments that applicants intend the perforated foil to be — extending—in the circumferential direction rather than be "oriented" in the circumferential direction (contrary to applicants arguments, one of ordinary skill in the art would attribute the art-specific definition to the term "oriented", meaning the structure of the material itself such as polymer chain structure has a particular orientation: see for example *Engineering Materials Properties and Selection*, pp. 48 and 49); one way to overcome this rejection would be to change "oriented" to — extending — in claim 6 lines 8 and 10.

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application 0 663 306 A2 cited by applicants.

See the translation p. 9 line 1 - p. 11 line 10, embodiment of Figure 2: sound-absorbing filler material housed in perforated bicycle inner tube or tire inner tube. It should be noted that the instant claim term "perforated foil" does not distinguish over the EP '306 perforated bicycle inner tube due to the indefinite nature of the term "foil" as discussed in paragraph 4 part b above. As to claim 7, the distribution of the perforations can be regular (p. 10 last line) and one of ordinary skill in the art would have understood the inner tube material itself to be isotropic unless otherwise specified, resulting in an isotropic inner tube.

### Allowable Subject Matter

- 9. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. Once the 35 U.S.C. 112 rejections of claims 6 and 7 are overcome as suggested by the examiner, claims 6 and 7 would receive favorable consideration because the prior art of record does not disclose or suggest providing the perforated bicycle inner tube or tire inner tube of EP '306 in the form of a perforated synthetic film, defined as a perforated layer of plastic material having a thickness of up to 0.25 mm.

### Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrienne C. Johnstone whose telephone number is (571)272-1218. The examiner can normally be reached on Monday-Friday, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-1226. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9311 for regular communications and (703)872-9310 for After Final communications.

Adrienne C. Johnstone Primary Examiner Art Unit 1733

Adrienne Johnstone January 26, 2004